## MOLLUSCAN NOMENCLATURAL PROBLEMS AND SOLUTIONS. NO. II.

By Tom Iredale.

Read 8th April, 1921.

## SUMMARY.

Museum Boltenianum.

C. S. Rafinesque.

"Les Fonds de la Mer" contains over 200 new species.

Megerle's MSS. Genera, cited by Scudder, only date from 1882.

Fabricius 1823: Names are not binomial. Neptunea, Bolten: Type N. despecta Bolten.

Siphonaria algestrae Q. and G. should be called S. grisea (Gmelin).

Crassatellites.

Buccinulum, Swainson.

## MUSEUM BOLTENIANUM.

The first edition of this work is now well known through the reprint of Sherborn and Sykes, but I have seen no notes regarding the second edition. This is reported to be a reprint of the first, and so far as my examination goes, though the pagination differs I have found nothing novel in the text. There are, however, attached four plates figuring certain species, and I note these species appear only as nomina nuda in the first edition. The figures, of course, validate the names, but only as from 1819, the date of the second edition. The preface is dated "Jan.", while the plates, all reversed, are lettered "J. J. Noodt" or "J. J. N." The figures have numbers inscribed against them, and I here transcribe the details for consideration:—

	2nd ed.		1st ed.
Plate 1,	p. 98, 1763.9	V(exillum) gloriosum .	p. 139, 1749.9
	67, 1202.47	E(pitonium) pulchellum .	95, 1226.48
	62, 1117.19	T(urbo) pulcherrimus .	88, 1139.19
	72, 1288.15	L(unatica) taitensis	102, 1313.15
Plate 2,	p. 58, 1037.14	T(rochus) Tectum chinense	81, 1057.14
	5, 73.66	P(atella) morio	7, 73.66
	59, 1071.6	C(idaris) otaitensis	84, 1093.6
	79, 1425.17	B(uccinum) fenestratum .	113, 1451.17
	6, 86.79	P(atella) oculus-cati	8, 86.78
Plate 3,	p. 31, 555.65	C(ucullus) annulas	44, 555.65
	31, 1686.5**	C(antharus) tribuloides .	133, 1671.5**
	130, 367.25	T(ellina) solaris	187, 369.25
	80, 1435.23	$B(uccinum) \ lamellosum$ .	113, 1462.23
Plate 4,	p. 113, 90.21	C(hlamys) erminea	162, 90.21
	114, 97.28	C(hlamys) tentorialis .	163, 97.28
	68, 1221.1a	S(trombus) palustris	96, 1245.1a
	14, 231.39	N(crita) maculata	19, 231.39

## C. S. RAFINESQUE.

A few years ago in these Proceedings (ix, 1911, pp. 261-262) I gave some details of the names proposed concerning molluscs by C. S. Rafinesque in his "Analyse de la Nature", a small and rare book published in 1815. The only copy available at that time was the one in the library of the Zoological Society of London, though another copy was on record in North America. I recently secured a beautiful, clean, and complete specimen, and at the same time obtained a small pamphlet, of which I here give details, because it is the only one I have note of in this country, and its contents are of great interest to the student of that unfortunate genius. Its title page reads: "Circular Address | on | Botany and Zoology; | followed by the | prospectus of two periodical works; | Annals of Nature | and somiology of North America. | By C. S. Rafinesque, | of the Royal Institute of Natural Sciences of Naples, | and of several other Learned Societies | in Europe and America. | Chi fa quanto puo, fa quanto deve. | Philadelphia: | Printed for the Author, by S. Merritt, | 74, south Second Street. | 1816."

The second page reads: "This Circular is respectfully directed to all the Naturalists, Botanists, and Zoologists; Professors and Students, Universities, Colleges, Institutes, and Learned Societies; Collectors of Natural Objects and Mecenates of Natural Sciences; Owners or Directors of Botanical Gardens, Museums or Public Libraries; and to all enlightened Gentlemen, Ladies, Travellers, Supercargoes, Merchants, Ship Captains, Booksellers, Reviewers, Physicians, Farmers, Planters, Cultivators, Nurserymen, Seedsmen, etc., etc., etc., in America, Europe, and all the parts of the world, by the Author."

The address begins: "To . . . Philadelphia", the intention apparently being to write the addressee's name in the spaces between the words; the wording starts: "I hope that the motives which lead me in the present instance, in taking the liberty to hand you this circular, will be considered as a sufficient apology for intruding so far upon you . . . After having published in Palermo in the early part of 1815, a comprehensive view of my new ideas on the study of nature, with the title of Analyse de la Nature . . . I meant to have paid a visit to the continent of Europe . . . but the new political convulsions which took place at that period, prevented me, . . . and induced me to leave Europe altogether and return to the United States of America with the intention of residing forever in that peaceful and happy country. . . . I left the island of Sicily on 21st July, 1815, and after stopping at Gibraltar and the island of St. Michael, I had reached the shores of America, when on the third of November, I had the misfortune to be shipwrecked, losing at once all my books, manuscripts, plates, drawings, maps, herbarium, collections, minerals, etc., the fruit of twenty years labours, exertions, and travels; it was even with the utmost difficulty that I saved

my own life, and landed near New London, in Connecticut. . . This dreadful misfortune has not, however, impaired my zeal; I am determined to begin again my labours. . . Such a circumstance gives me a claim to your support; indeed, in the destitute state in which I have been left I must crave it. . . Allow me to state that I mean to reside in Philadelphia, but to employ part of this and next year in travelling to collect a new extensive American herbarium, etc., which will enable me to begin useful exchanges. I shall therefore delay my publications till next year. . . Gentlemen in all parts of the world! If we are already united by a mutual love of nature, and pure zeal for the investigation of the wide fields of natural sciences, let us strengthen the ties of our union by a friendly intercourse and beneficial exchange of labours, knowledge, and discoveries: I tender you the invitation, in full hope of meeting a suitable return on your side; I have not said all I might on the subject, but if our pursuits are similar, we shall understand each other, and you may easily supply all my omissions, by fancying yourself in my situation, and remembering that I unite to the most glowing ardour for the knowledge of nature, the most ardent desire to promote its study, by all the means in my power. Believe me, therefore, forever, your sincere well-wisher, constant friend, and fellow admirer of nature. C. S. Rafinesque."

This address covers six and a half pages, with very full instructions as to wants, etc., and is a delightful production. It is followed by a series of "Notes", which are important, and from which I extract the following items: "1. I will add a list of all my works and tracts, for the information of those who are not yet acquainted with any or the whole. . . 2. Analyse de la Nature. This work is the outline of a larger one on the plan of the Systema Naturæ of Linnaeus, which will be gradually undertaken at a future period. . . 3. The following are the names of the principal manuscripts I had nearly ready for the press, and which were lost in my shipwreck. . ." Then follows the prospectus of the "Annals of Nature, or Repository of Natural Sciences, particularly Botany, Geology, Mineralogy, and Geognosy." "This periodical work will come out in numbers, once every season: in Spring, Summer, Autumn, and Winter. Four numbers shall complete one year and one volume. . . Each number shall contain from 60 to 100 pages, in 8vo, and sometimes one plate. The subscription shall be \$2 per annum." The most interesting item then follows, the prospectus of the "Somiology of North America, including the Flora and Fauna, or the Botany and Zoology of the United States of America and the Adjacent Countries. Perseverance, C. S. Rafinesque will attempt to carry into execution an undertaking . . . respecting the Plants and Animals of the United States, or North America in general . . . the adoption of the 8vo size, and the figures engraved on wood . . . The outlines of this plan are as follow: Every specie of Plant and Animal will be drawn

by C. S. Rafinesque, or under his direction . . . To such a plate shall be annexed a full account of the specie or species, therein figured, contained in two, three, or more pages 8vo of letter press. . . This undertaking will begin in 1818 . . . when begun, from twenty to fifty plates, etc., will be issued monthly. . . The price to subscribers for the whole work, or any set or sets, of 100 numbers and upwards, will only be 5 cents for each number, containing one plate and several pages of description and elucidation. Should any subscriber want his plates neatly coloured, he must then pay double price or 10 cents for every number. . . Every 100 numbers will form a Centuria or Volume. . . Notwithstanding the magnitude of the undertaking, it is hoped it will be found an easy task: to complete the whole work about 5,000 numbers and 8 or 10 years are required. . ." Then a detailed synopsis of the work appears; "I. General Sets. 1. General Flora, or Botany of North America: about 4,000 species and 3,000 numbers. 2. General Fauna, or Zoology of North America: about 4,000 species and 2,000 numbers. II. Classical Sets." 26 of these are recited, No. 14 being "Apalogy of the United States, or Natural History of the Mollusks (including shells); over one hundred and fifty species." "III. Sets of Orders," six of these including "31. Real Natural Orders of Animals: sixty-four numbers. N.B. Some peculiar sets may be asked, of any striking Orders of Animals, such as . . . Spironotia the Spiral Shells, Bivalvia the Bivalve Shells, etc." "IV. Sets of Families. V. Sets of Genera, VI. Sets of Practical Floras and Faunas. VII. Sets of the State Floras and Faunas. VIII. Sets of Tract Floras and Faunas. IX. Sets of the Local Floras and Faunas," and "X. Sets of Adjacent Floras and Faunas." One hundred and fifteen variations of the above are cited, with a proviso that any other combination that suggests itself to the subscriber will be supplied.

From the plate in the Analyse, which gives his birth date as 1783, Rafinesque was only 33 when he projected this wonderful work, and as his Analyse was published previously, his genius is unmistakable. As I pointed out at the time of my previous paper, Rafinesque's names are troublesome in many ways, and I here call attention to a couple of instances. Thus, recently Dall recorded the fact that the genus name Mitra dated back to Martyn, where it had been validly introduced in connexion with a species quite unlike the typical species associated with the genus name by Lamarck. He therefore proposed Papalaria for the Lamarckian Mitra. In the "Analyse de la Nature", p. 145, 1815, Rafinesque had proposed "Mitraria, R. for Mitra, Lam.", so that Rafinesque's name would become usable in preference to Dall's novel proposal. In the Bulletin, U.S. National Museum, 112, 1921, Dall has published his long-waited for "Summary of the Marine Shell-bearing Mollusks of the North-West Coast of America", and all conchologists must unite in thanks for this excellent catalogue, wherein probably the only weak spots will be found in connexion with those groups where acknowledgment is accredited to his catalogue, such as the "family Synceratidæ". There is no such group in valid nomination, being simply another of Bartsch's blunders, the name Syncera Gray, 1821, being a nomen nudum, and therefore unavailable in the connexion cited. However, as to Mitra, Dall has continued, through inadvertence, the quotation (p. 87) of Mitra Lamarck, 1799, ranking Thala as a section only, a value quite unacceptable, the true Thala probably not even belonging to the family Mitridæ. On the same page he includes the genus Mitromorpha A. Adams with a ? in front of it. This cannot be understood in connexion with the facts without explanation. The genus is quite valid, so we can only surmise that the ? refers to the position in the family, which is not a customary mode of expression.

The other item is the status of such a name as "Laphrostoma, R. (1815)" for "Neritina, Lam." At the time that was written there was no Latin name Neritina, the name only existing in the vernacular "Neritine". The anomaly will then exist, if these prove acceptable, of the substitute name dating earlier than the one for which it was provided. In the present case it would mean the rejection of Neritina, Lamarck, even of 1816, in any connexion.

## LES FONDS DE LA MER.

This rare, but important work is not known to all malacologists, and, moreover, is not commonly accessible. In 1913 a copy was secured by the British Museum (Natural History), and was examined by me in connexion with Pyramidellid nomenclature. A little later my friend, Mr. Alex Reynell, showed me some parts he had secured and I borrowed them for comparison and made some notes. I have just secured a perfect bound copy, which has enabled me to complete my examination leisurely, and I here give my results. The title page of Volume I states that it contains about 500 figures, representing 250 species and 300 pages of text, "commencée et dirigée par MM. L. de Folin and L. Périer," and published at "Paris, Savy, Libraire-éditeur, rue Hautefeuille 24, 1867-71". The exact pagination is 316, and 33 plates are included. Vol. II has the same wording, but "about 120 figures representing 60 species", and the date is 1875. The exact pagination is 365, and there are 11 plates with 11 explanatory pages. Vol. III has again the same wording, with "about 115 figures representing 75 forms", and the date 1875-9. The exact pagination is 337, and nine plates, each with explanatory text. No information as to method of publication can be gauged from these so that Reynell's parts are The covers read "Les Fonds de la Mer... par very valuable. MM. Berchon, De Folin, Périer . . . Edition avec planches, paraissant par livraisons de 16 pages". Reynell's lot consists of the fourth

to nineteenth livraisons, and the following items stand out. Livraisons 4 and 5 were published at Bordeaux at the Imprimerie G. Gounouilhou, 11 Rue Guiraude, and are dated 1868. Then the place of publication was changed to Paris, as given above, and livraisons 6 and 7 came out in one cover, also dated 1868. On the back of the cover is now printed: "Conditions de la Souscription. France: 1 fr. 50 la livraison; Étranger: suivant les tarifs postaux. On souscrit pour cinq livraisons payables d'avance. Vingt livraisons forment un volume contenant environ trente planches." Livraisons 8, 9, 10, 11 came out separately, each dated 1869. Then 12 and 13 came out in one cover, and 14, 15, 16 separately, each dated 1870. Livraison 16 is curious, as the pages are headed 239-54, whereas they should be 241-56, and apparently a corrected livraison was issued, since in the bound work the lettering is corrected. Livraison 17 is dated 1871, and livraisons 18 and 19 appeared separately dated 1872. These prove the title page dates to be incorrect, and all the dates given in the text are simply MS. dates, and have nothing to do with publication. Apparently the first volume did appear in livraisons of 16 pages each, but it will be noted that twice two appeared together. The cover only of the third livraison is of the Bordeaux print, and is dated 1867.

Nearly 200 new species are described in the work.

## MEGERLE'S MSS. GENERA.

In the Nomenclator Zoologicus by S. H. Scudder, published as Bulletin U.S. Nat. Mus., No. 19, 1882, there is a pitfall for the systematist I have not seen emphasized. In the preface to part i is written (p. vi) "It is a special pleasure to acknowledge my indebtedness to Mr. Alexander Agassiz, who freely placed at my disposal the manuscript additions and corrections which Professor Agassiz had made to his Nomenclator," and (p. xviii) "the name Agassiz is appended to all entries copied from his manuscript additions to the Nomenclator of 1846". Among such entries is a long series of generic names, copied from a MS. of Megerle, and to most of these an equivalent is cited. I have gone through the Nomenclator and extracted all these names, and here give a list, though on account of the difficulty it may not be complete. I give them in alphabetical order for ease of reference.

Albula	= Natica according to Agassiz MS.	Callunea	= Helicogena Risso.
Anomalia	== Leucochroa	Canaria	
	Beck.	Cantharus	
Artemon	= Strombus.	Carinaria	=Littorina.
Atracta	=Fusus.	Cercon	= Pupa.
Brandaris	= Murex.	Chamaeleon	•
Cabestana		Cochlus	
Cadus		Cochlidium	= Buccinum.

Contorta		Noachina	
Corniculum		Obvoluta	= Vortex Beck.
Costularia		Omalota	= Oxychilus
Crassilabrum			Fitzinger.
Cratera	= Eyryomphala	Omphala	= Antigona
	Beck.	1	Schumacher.
Cruentata	= Lucina.	Onychina	= Neritina.
Cucurbita	=Mitra.	$Orreve{bitis}$	= Teba Leach.
Cyphona	=Bulla Lam.	Orthocentrus	= Strombus.
Cymatia	= Trochus	Pedicularia	= Trivea [sic]
Dactylium	= Pterocera.	Megerle	Gray.
Dactylophora		Pelecania	= Chenopus
Dentina	= Castalia ?		Philippi.
Elea	= Neritina.	Phonurga	=Bulimus.
Elatia	= Pleurotoma.	Planuria	= Turbo.
Epidromus	= Strombus.	Platyostoma	= Buccinum.
$\dot{Epiploa}$	= Triton.	Pomularia	= Dolium.
Epitonium	= Cerithium.	Praenuntius	= Turbo.
Fimbriola	= Cassis.	Pronuba	=Lucina.
Femorale	= Triton.	Pterygia	= Marginella.
Fusula	= Fusus.	Pumilio	= Helix.
Ferricolaria		Pyrena	=Pupa.
Glabrella		Rapa	= Pyrula.
Glandula	=Bulla.	Rotala	=Helix.
Gallus	= Strombus.	Rubeta	= Triton.
Gaffraria	= Venus?	Saga	= Oliva.
Haustorium	= Purpura.	Sagitella	= Orthocera?
Hystrionica	= Tachea Leach.	Scaevola	= Bulinus.
$Lancinula^{ au}$		Scaphula	=Arca.
Labialia	= Neritina.	Scopus	= Trochus ?
Luhuana	= Strombus.	Serrostoma	= Turbo.
Lunatica		Sinula	= Pirena?
Magula	= Trochus.	Sinum	= Turbo.
Mirana	= Terebra	Sphaerostom	a = Turbo.
Misile	= Ovula.	$\vec{Spolium}$	= Turbo.
Minaretus	= Pyramidea	$ ilde{Tetrana}$	= Sanguinolaria ?
	Swainson.	The obroma	= Auricula.
Megastoma	= Pomatia Beck.	Tribulus	
Nauticaria	= Cymbium	Umbella	= Patella.
	Schum.	Urcea	= Strombus.
Nodularia	= Helicodonta	Valgum	= Pupa.
	Férussac.		

None of these names appears to have been previously published, although twice a reference is given to "Berl. Mag.", once in connexion with *Elatia*, the other with *Noachina*, when the year 1811 is added. Megerle wrote a few papers in that journal, but I

have not found either of these names. Scudder does not appear to have recognized Megerle as his own "Mühlfeldt", as he also includes "Cratere, Mühlfeldt (cf. Porro, Mal. Prov. Com. p. 47), 1838. Dentina, Mühlfeldt MSS., Teste Villa, Disp. Syst., p. 45 (= Lentidium Cr. et Jan.), 1841. Contorta ib. ib., p. 19 (= Drepanostoma). Thiara,

Mühlefeldt Cat. MSS. (= Melania) Agassiz."

It is now considered correct for a worker to verify all references, and in these instances none of the names call for recognition anterior to Scudder's publication of them. Nevertheless, we find that Cossmann has proposed Antimurex (Essais de Paléoconch comp. livr. 5, p. 12, Décembre, 1903) as a new name to replace Crassilabrum Jouss(eaume), non Megerle; but Megerle's name was not published until after Jousseaume's and, furthermore, at that later date is absolutely a nomen nudum.

## Fabricius' 1823 Names.

Another series of generic molluscan names that has been recorded by Scudder are those accredited to Fabricius, which appeared in a tract entitled "Fortegnelse over afg. Bishop Fabricius ses esterladte Naturalier", the date being given as 1823.

The list of names is not regularly binomial, and questionably of binary composition. They are all nomina nuda, and no authorities being cited, consequently indeterminable. I have noted the

following :—
PAGE.

53. Unino. Apparently ? error for Unio.57. Macra. do. do. Mactra.

70. Birostris. Cited by Scudder as "Fabricius Cat. Cab. Fabr. (= Birostra Swains), 1823 Agassiz".

71. Catinus. id.

74. Plicaria. id. (= Cancellaria). 80. Tuba. id. (= Achatina).

81. Unicornu. Not in Scudder.

83. Tusus. Apparently? error for Fusus.

Sipho. Scudder, "Fortegn, p. 83, 1822."

Simpulum Not in Scudder.

86. Pugil. Scudder, "Fortegn, p. 84, 1822." Digitata. id.

87. Varicaria. Scudder as "Fabr. Cat. Cab. Fabr. ex Agassiz= Purpura".

90. Canistrum. Not in Scudder.

93. Lunaria. Scudder, "Fortegn."

94. Auricularia. Scudder as "Fabr. Cat. Cab. Fabr. ex Agassiz" = Lymnæa.

98. Saccus. id. = Ampullaria. 101. Labiata. Scudder, "Fortegn."

104. Caminata. As "Fabr. Cat.", etc. = Fissurella. Coronaria. id. = Aspergillum.

Apparently Scudder saw a copy and collated the names which he claims and cites "Fortegn, 1822"; the other names are included from the Agassiz MS., and in two instances duplications occur as Puqilis for Puqil and Labrata (= Caluptræa) for Labiata.

## NEPTUNEA, BOLTEN.

I herewith designate as type of *Neptunea*, Bolten, Mus. Bolten, p. 115 (pref. Sept.) 1798, the first species *N. despecta*, Bolten based on Martini 4, t. 138, f. 1296.

In view of Dalls' recent transference of Bolten's name from the shells with which it had been associated for from fifty to seventy years without question, to another well-known series with which it had never been considered until 1902, I have searched through the literature in an effort to find a legitimate type designation which would enable a definite settlement. I found that all the leading conchologists, whether British, Continental, or American, had continually used Neptunea, when their attention was drawn to it, in the sense above designated, and had cited as examples the shell-form I have named. The above definite designation will, I hope, place their action beyond dispute, and is in agreement with the opinions of the International Commission on Zoological Nomenclature, that a rigid observance of the rules of type-selection is absolutely necessary in doubtful cases.

# SIPHONARIA GRISEA vice S. ALGESIRÆ, Q. & G.

In 1833 Quoy and Gaimard described a Siphonaria from the Straits of Gibraltar in the "Voy. de l'Astrol", vol. ii, p. 338, as S. algesiræ, and it was figured on pl. xxv, figs. 23-5. It is fairly well known under that name, but appears to have been named many times previously, and also since.

Blainville, in the "Dict. Sci. Nat." (Levrault), vol. xxxii, p. 267, 13th November, 1824, admitted Sowerby's genus Siphonaria, and recognized the shell figured by Adanson under the name "Mouret" as a member of the genus. He proposed to name it Siphonaria mouretus.

In the following volume, published 22nd January, 1825, Blainville, p. 161, introduced the genus Mouretus for the Mouret of Adanson ("Séneg.," p. 34, pl. 2), naming the species Mouretus adansonii. He here stated that his genus was identical with the prior Siphonaria of Sowerby, and in vol. xlix, published on 13th October, 1827, he monographed the genus Siphonaria, explaining: "Adanson . . . designée sous le nom de mouret; aussi depuis longtemps, dans mon Genera, envoyé en Angleterre en 1816, pour le supplément à l'Encyclopédie d'Ecosse, je l'avois séparée pour en constituer un genre distinct, auquel je conservois cette denomination." On p. 295 he named the species Siphonaria adansonii. About the same time, in the Tankerville Coll. Catalogue, published in January, 1825, Sowerby introduced (p. 32) Siphonaria mouret for "Mouret Adanson."

It is somewhat obvious that Adanson's shell is the same as Quoy and Gaimard's, and it is interesting to find confirmatory evidence as follows: In the "Journ. de Conch.", vol. xi, 1863. M. Petit de la Saussaye, commenting upon a Catalogue of the Marine Mollusca of Algeria by Weinkauff, wrote (p. 142):—"Siphonaria striatocostata. M. Philippi a décrit sous ce nom une Siphonarie de la côte du Sénégal, qui nous parait être le Mouret d'Adanson, dont le S. Algesira de M. Quoy pourrait bien n'etre qu'une variété." On p. 233 Weinkauff pointed out that it was not Philippi but Dunker, "Index Molluscorum," etc., pl. 1, fig. 1-6, who had named the shell, but did not discuss the identification. Recently Dautzenberg ("Mém. Soc. Zool. France", vol. iii (ante 30th July), 1890, reporting upon Senegal molluses, included (p. 164) "Siphonaria algesiræ, Quoy & Gaimard = ? Mouret Adanson, Dakar! abondant."

The identification can scarcely be doubted, but Menke, in the "Zeitschr. für Malak", x, 1853, dealing with West Indian shells, has recorded (p. 68) that Siphonaria mouret, Sowerby is Patella grisea, Gmelin n. 188, based on Adanson's Mouret, and this is correct, so that Patella grisea, Gmelin, "Syst. Nat.," i, pt. 6, 1791, p. 3727, No. 188, is available, and consequently the shell here treated should be called Siphonaria grisea (Gmelin, 1791). Reeve described Siphonaria venosa (Conch. Icon., pl. iii, sp. 10, f. 10a, b, March, 1856), from the Cape Coast, and Reeve's type seems to be simply a

monstrosity of this species.

It is possible that this species is subgenerically separable from typical Siphonaria, in which case Mouretus must be used. Nobre in the "Journ. de Conch.", 3rd series, vol. xxvi, 1886, p. 32 (received B.M. 8th June, 1886), indeed introduced Patellopsis as a new subgenus for this shell, but Mouretus must be used instead.

#### CRASSATELLITES.

This name has been used in recent conchological science as a valid substitute for Crassatella. The latter name was proposed for one group and used for a different one. The misusage has been corrected (!) by the acceptance of the above name, but further consideration seems necessary. Upon looking into the question, I found this name to be simply one of a very long series of names proposed simply as substitute names for fossil representatives of recent genera. Should they be regarded as such, or should they be restricted to fossil shells? Upon referring to Sherborn's "Index Animalium", such names will be found recorded as occurring as early as 1759, and these have been here ignored.

Schlottheim in the "Taschenb. Mineral" (Leonhard) 17th year, 1813 (pref. dated Easter, 1813), includes over thirty, of which I merely cite Nautilites, Helicites, Turbinites, Patellites, Chamites, Donacites, Anomites, Buccinites, Ostracites, Trochilites, Venulites, Dentalites, Muricites, Bullites, Pectinites, Pinnites, Tellinites, Neritites, Strombites, Solennites, Pholadites, Mytulites, and Volutites. In 1820 Schlotheim (sic) added a few more, and then Kruger in the "Geschichte der Urwelt", vol. ii, 1823, continued the series by addingites to almost every known genus name, fifty-five being collated by me, including the present one, Crassatellites. The rejection of all these as applicable to recent conchology is advisable, but the means of doing so needs consideration. Thus, one instance of the complexity of the problem appears in connexion with Bullites, Schlottheim, 1813. If this be regarded as a substitute name only for Bulla L., it has priority over Bullaria, Rafinesque, 1815, but its usage would be paradoxical, and the fossil "Bullas" included under Bullites appear to have little relationship with the recent species we know under the name of "Bulla"—Bullaria of recent usage.

## BUCCINULUM, SWAINSON.

Mr. J. R. le B. Tomlin showed me a little book and allowed me to make the following notes. The cover and title page reads: "Catalogue | of the | Foreign Shells | in the possession | of | the Manchester Natural History Society, | arranged according to the system of Lamarck. | 1837." No author's name appears, and the list extends to 99 pages, names sometimes accompanied by localities, generally without authorities, sometimes the latter, and in a few cases "MSS." added.

It may have been drawn up from Swainson's manuscripts, since most of the novelties are accredited to him. Moreover, mis-spellings, the hall-mark of Swainson's touch, commonly occur, such as p. 37, Moretsia, Sowerby, for Mouretia. Only three names appear to be of importance: thus on p. 67, under the genus Turbinella, against a series beginning with T.capitellum, there is noted in brackets Plicatella, Swainson, and on p. 75, in the same manner, Lobatus, Swainson, is recorded for Strombus bituberculatus; and on p. 81 Buccinulum, Swainson is referred to in connexion with Buccinum lineatum, lineolatum, maculosum and coromandelianum. Similarly introduced names have been accepted, so it appears that the above three names should be made use of. The only one needing consideration is that used as the heading of the note, and I herewith designate Buccinum lineatum as type. This may be regarded as indeterminable, or otherwise the name Buccinulum will come into use for the New Zealand shell, now known as Euthria linea (Martyn), which, however, would bear the name of Evarne linea (Martyn) if my conclusions as to its separation were accepted. Under the present circumstances the name would become Buccinulum linea (Martyn), and Euthria would be preserved for the European cornea, L. These species were discussed in a previous number of these Proceedings (antea, vol. xiii, pts. 1-2, p. 33, 1918).